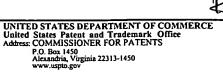


UNITED STATES PATENT AND TRADEMARK OFFICE



| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---|----------------|----------------------|-------------------------|------------------|--|
| 09/992,874 | 11/06/2001 | Cole M. John | KOL-10-5565 | 7654 | |
| 27422 75 | 590 03/08/2004 | | EXAMI | EXAMINER | |
| DRIGGS, LUCAS, BRUBAKER & HOGG CO. L.P.A NGUYEN | | | DINH Q | | |
| DEPT. KOL 8522 EAST AV | /ENUE | | ART UNIT | PAPER NUMBER | |
| MENTOR, OH | I 44060 | | 3752 | | |
| | | | DATE MAILED: 03/08/2004 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Applicati n N . | Applicant(s) | \mathcal{N} | | | |
|---|---|--|---------------|--|--|--|
| Office Action Common ma | 09/992,874 | JOHN ET AL. | _ (` ` | | | |
| Offic Action Summ ry | Examiner | Art Unit | | | | |
| | Dinh Q Nguyen | 3752 | | | | |
| The MAILING DATE of this communication app Peri df r Reply | ears on the cover sheet with the c | orrespondenc addre | ss | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 6(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI | nely filed s will be considered timely. the mailing date of this commi | unication. | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on | _• | | | | | |
| 2a)⊠ This action is FINAL. 2b)□ This action is non-final. | | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| closed in accordance with the practice under E | x parte Quayle, 1935 C.D. 11, 45 | i3 O.G. 213. | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) 1-28 is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5)⊠ Claim(s) <u>1-27</u> is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>28</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or | election requirement. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner | ·. | | | | | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11)☐ The oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action or form PTO-1 | 152. | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign | priority under 35 U.S.C. § 119(a) | -(d) or (f). | | | | |
| a) All b) Some * c) None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau | • | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| Attachment/c\ | | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) | 4) Interview Summary | (PTO-413) | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Da | te | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | 5) Notice of Informal Pa | atent Application (PTO-152 | 2) | | | |
| J.S. Patent and Trademark Office | | | | | | |

Application/Control Number: 09/992,874

Art Unit: 3752

DETAILED ACTION

Claim R j ctions - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Imai et al.

Imai discloses 4 nozzle assemblies 26 for descaling a continuously strip of metal S, they are divided into pairs of nozzle assembly, each pair covering half surface of the strip metal S with the centerline at L1 as shown in figure 4, each of the nozzle assembly is designed to swing around an axis to adjust the spray width of the nozzle assembly with the width of the metal strip and further to provide a position in which the maintenance and inspection can be done on the nozzle assembly without shutting down the production line as disclosed in column 2, lines 1-37 and column 8, lines 27-37 and also shown in dotted lines in figure 4. Therefore, it would have been obvious to one having ordinary skill in the art to configure the nozzle assemblies of Imai in such away that could provide the production line with operational continuously by maintain one nozzle assembly in each pair of nozzle assembly in an operation position and the other nozzle assembly in an maintenance position. Doing so would provide an effective production line without downtime on the equipments.

Art Unit: 3752

Allowable Subject Matt r

3. Claims 1-27 are allowed.

Response to Arguments

- 4. Applicant's arguments filed December 30, 2003 have been fully considered but they are not persuasive.
- 5. Applicant's arguments with respect to claim 28 have been considered but are moot. The Imai et al. patent teaches the concept of placing the nozzle in an inspection and maintenance position without shutting down the production line (column 2, lines 32-37). It is within one skilled in the art and of an obvious matter choice to have an array of nozzles on an operation position and the other array of nozzles on an maintenance position to limit the down time of the production line. Claim 28 is an apparatus claim, but the language of the claim is of a process claim with functional recitations and intended use recitations. Therefore, the functional recitations and the intended use recitations of the claim such as "moveably mounted for repositioning to a maintenance station" or "moveably mounted for repositioning to spray"; "normally position to spray" or "normally position in a maintenance station" have not been given patentable weight because it is narrative in form. In order to be given patentable weight, a functional recitation must be express as a "means" for performing the specific function, as set forth in 35 USC 112, 6th paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language. Furthermore, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be

Application/Control Number: 09/992,874

Art Unit: 3752

3

employed does not differentiate the claimed apparatus form the prior art apparatus satisfying the claimed structural limitations.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dinh Q Nguyen whose telephone number is (703) 305-0248. The examiner can normally be reached on Monday-Friday 6:30-4:00 alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar can be reached on (703) 308-2087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 09/992,874 Page 5

Art Unit: 3752

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dinh Q Nguyen Primary Examiner Art Unit 3752

dqn